

TWO NEW DISTRIBUTIONAL RECORDS FOR U. P. PLAINS

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During a study of the vegetation of Bulandshahr District of U.P. in April 1963, the following two plants were collected which do not appear to have been recorded previously from the plains of Uttar Pradesh. The specimens are deposited in the Herbarium of the Northern Circle, Botanical Survey of India, Dehra Dun. Brief notes on the two species are given here.

Cuscuta capitata Roxb. Fl. Ind. 1: 448, 1820; Fl. Ind. 3: 150, 1832; Clarke in Hook. f. Fl. Brit. Ind. 4: 227, 1883.



Figs. 1-6. *Cuscuta capitata* Roxb.

1. Habit. 2. Long. sec. of flower. 3. Calyx. 4. Corolla with stamens. 5. Gynoeceium. 6. Stamen.

The plant was found growing as a parasite on *Medicago sativa* Linn., which is cultivated for fodder in the fields near Aurangabad, a town approximately 14 km from Bulandshahr. Clarke (*loc. cit.*)

gives the distribution of the species as temperate West Himalayas from Kashmir to Simla at altitudes 6000-12000 ft. He further remarks that it is an "unmistakable species, and as Englemann noticed, agrees well with Roxburgh's figure and description; the puzzle is whence Roxburgh got it; he says it grew abundantly on *Crotalaria juncea*, a plant cultivated at or near sea-level". From an examination of the herbarium sheets from N. W. Himalayas, it is observed that *Medicago sativa* Linn. is the usual host plant for this species. *Medicago sativa* is now being cultivated in the hills as well as in the plains and the extension of distribution of the parasite to the plains is to be expected. It is possible that further search will reveal the presence of this parasite in other plains districts as well.

A pale yellow leafless parasite twining around the host and with white flowers in capitate heads. N. P. Singh 27435 (26 April, 1963).

Clinopodium umbrosum (M. Bieb.) Koch in Linnaea 2: 673, 1848; *Melissa umbrosa* M. Bieb. Fl. Taur. Cauc. 2: 63, 1808; *Calamintha umbrosa* Fisch. et Mey. Ind. Sem. 6: 6, 1840. Hook. f. Fl. Brit. Ind. 4: 650, 1885. Duthie, Fl. Upper Gang. Pl. (Rep. ed.) 2: 108, 1960.

This species was collected from the ravines along the banks of the river Ganges at Anupshahr, a place about 37 km away from Bulandshahr. Duthie (*loc. cit.*) has recorded it from Dehra Dun and its environs but gives its distribution as temperate Himalayas from Kashmir to Bhutan upto 12,000 ft, Khasia Mts. upto 4000 ft and the hilly portions of Peninsular India from the Konkan southwards to Ceylon.

A slender procumbent or decumbent laxly hairy herb with opposite leaves and blue flowers. N. P. Singh 27406 (22 April, 1963).

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